## Index of Claims

| Application No.  | Applicant(s) |  |
|------------------|--------------|--|
| 10/748,827       | KWON ET AL.  |  |
| Examiner         | Art Unit     |  |
| Daniel S. Larkin | 2856         |  |

| Rejected | 1 | (Through numeral)<br>Cancelled |
|----------|---|--------------------------------|
| Allowed  | + | Restricted                     |

| z | Non-Elected  |
|---|--------------|
| - | Interference |

| A | Appeal   |
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| Cla      | 7              |          |               |          |          |                |          |          |          |          | _  |  |          |          |          |          |          |          |               | _      |   |               |          |          |          |        | _        |        | _      | _            | _      |
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|          | im {           |          |               |          | C        | ate            |          |          |          |          | #[ | Cla  | alm<br>m |          |          |          | Date     |          |               |        |   | Cla           | im_      |          |          |        | 무        | ate    | -      | <del>_</del> | _      |
| Final    | Original       | 10/21/04 |               |          |          |                |          |          |          |          |    | Final  | Original |          |          |          |          |          |               |        |   | Final         | Original |          |          |        |          |        |        | ١            |        |
|          | 4              |          | -             | 4        | 4        | 4              | -        | 4        | $\dashv$ | _        |    |  | 51       | Н        | +        | ╀        | $\vdash$ | +        | +             | -      |   |               | 101      | ┥        | $\dashv$ | +      | $\dashv$ | +      | +      | +            | +      |
|          |                |          | +             | +        | -        | -              | +        | ┥        | ┥        |          |    |  | 52       | Н        | +        | +        | +        | ╅        | +             | Н      |   |               | 102      | ┪        | 7        | 7      | ┪        | 1      | 7      | 十            | 1      |
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|          |                | _        | -             | -+       | -        | $\dashv$       | -        |          |          |          |    |  | 54       | Н        | $\dashv$ | +        | +        | +        | +             | Н      |   |               | 104      | -        | _        | +      | 7        | ┪      | ┪      | 十            | 十      |
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|          |                | -        | $\dashv$      | -+       | ┥        |                | -        | -1       |          | -        |    |  | 56       | $\vdash$ | $\dashv$ | +        | Н        | +        | ╅             | Н      |   |               | 106      | $\neg$   | 一        | ┪      | 7        | 寸      | 7      | 十            | 7      |
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|          | -(-)           | Н        | $\dashv$      | -        | ⊣        |                | $\dashv$ | -1       | -        | ⊣        |    |  | 58       | Н        | +        | +        | +        | +        | +-            | Н      |   |               | 108      | 寸        | -        | 7      | 寸        | 1      | 7      | 十            | 7      |
| -        |                |          | -             | -+       | -        | -              | $\dashv$ |          | -1       | $\dashv$ |    |  | 59       | Н        | -+       | ╅        | 1-       | ╛        | +-            | Н      |   |               | 109      | 一        | _        | 7      | _        | 7      | 寸      | 十            | 7      |
|          |                |          | 4             | -1       | $\dashv$ | -              | -        |          | -1       | $\dashv$ |    |  | 60       | ╌        | ╅        | +-       | ╁┤       | -+       | +-            | Н      |   |               | 110      | _        | +        | ┪      | 7        | 7      | Ħ      | 十            | ヿ      |
|          | D              |          | -             | +        | -        |                | -        | ᅥ        | $\dashv$ | ᅱ        |    |  | 61       | Н        | -+       | +        | +        | $\dashv$ |               | Н      |   |               | 111      | -        | _        | ┪      | ┪        | ┪      | _      | 十            | 7      |
|          | 1              | Щ        | 4             | -        | 4        |                | $\dashv$ | -1       | $\dashv$ |          |    |  | 62       | H        | $\dashv$ | +        | ++       | $\dashv$ | - -           | Н      |   |               | 112      | $\dashv$ | $\dashv$ | 7      | ┪        | 7      | 寸      | 十            | 7      |
|          | 12<br>13       | $\vdash$ | -+            | -+       | -        | $\dashv$       | $\dashv$ |          | $\dashv$ | $\dashv$ |    | _  | 63       | Н        | -+       | +        | +        | $\dashv$ | +             | Н      |   |               | 113      | $\dashv$ | _        | 7      | ┪        | -1     | ┪      | 十            | 7      |
| -        | IF.            | $\vdash$ | +             | -+       | {        | $\dashv$       | $\dashv$ | -        |          | $\dashv$ |    |  | 64       | Н        | 十        | +        | 1-1      | +        | +             | Н      |   |               | 114      | $\dashv$ | _        | 寸      | 1        | 7      | 7      | 十            | 1      |
|          | 5              | Н        | $\dashv$      | -+       | -        |                | ┥        |          | $\vdash$ | $\dashv$ |    |  | 65       | Н        | +        | $\dashv$ | +        | $\dashv$ | +-            | Н      |   |               | 115      | $\dashv$ | ┪        | 寸      | 7        | 寸      | _      | 7            | ┪      |
| _        | P.             | Н        | -             | -+       | -        | -              | ⊣        | -        | -        | $\dashv$ |    |  | 66       | Н        | +        | ╅        | +        | -        | +             | Н      |   |               | 116      | П        | 寸        | 一      | 7        | 7      | ┪      | $\dashv$     | 十      |
|          | 17             | Н        | -             | ┵        |          | $\dashv$       | Н        | $\dashv$ | Н        | $\dashv$ |    |  | 67       | $\vdash$ | -+       |          | +        | $\dashv$ |               | Н      |   |               | 117      |          | _        | ╛      | ╗        | 7      | ヿ      | $\neg$       | $\neg$ |
|          |                | $\vdash$ | $\dashv$      | -        |          |                | Н        | -        | $\vdash$ | $\dashv$ |    |  | 68       | Н        | -+       |          | 1        | -        | +-            | Н      |   |               | 118      | П        | 7        | ┪      | ᅥ        | 7      | ┪      | $\dashv$     | ┪      |
|          | 18             | -        | $\dashv$      | -        | -        | $\vdash$       | Н        | $\vdash$ | -        | $\dashv$ |    | _  | 69       | Н        | -        | -        | +        | $\dashv$ |               | Н      |   |               | 119      | $\Box$   | $\neg$   | ᅥ      | $\neg$   | ╗      | $\neg$ | $\neg$       | ┪      |
|          | 19             | $\vdash$ | $\rightarrow$ |          | $\dashv$ | Н              | Н        | $\vdash$ |          | $\dashv$ |    |  | 70       | Н        | -        | +        | +-       | $\vdash$ | -1-           | Н      |   |               | 120      |          | $\neg$   |        | $\neg$   | 一      |        | $\neg$       | ┪      |
|          | <b>2</b> 0€    | 7        | -             | -        | -        | -              | -        | $\vdash$ | $\dashv$ | $\dashv$ |    |  | 71       | $\vdash$ | $\dashv$ | +-       | +        | Н        | +             | Н      |   |               | 121      |          | 7        | ┪      | ┪        | 7      | ┪      | $\neg$       | ┪      |
|          | 22             | 70       | $\dashv$      | -1       | -        | Н              | Н        |          | -        | $\dashv$ |    |  | 72       | Н        | 1        | +        |          | $\vdash$ |               | Н      |   |               | 122      | Н        |          | $\neg$ |          | $\neg$ |        | 一            | $\neg$ |
|          |                | 7        | Н             |          | -        | -              | $\vdash$ | -        | $\vdash$ | $\dashv$ |    |  | 73       | Н        | -        | +        | +        | $\dashv$ |               | Н      |   |               | 123      |          |          | ┪      | $\neg$   | $\neg$ | $\neg$ | $\dashv$     | 7      |
|          | <b>33</b> (24) | 6        | $\dashv$      | -        | -1       | -              | -        |          |          | $\dashv$ |    | —  | 74       | Н        | -        | +        | 1        | $\dashv$ |               | Н      |   |               | 124      |          | $\Box$   | ┪      |          |        | $\neg$ |              |        |
|          | 25             | 0        | $\vdash$      | -        | -1       | $\vdash$       | Н        | Н        | $\vdash$ | $\neg$   |    |  | 75       | Н        | 1        |          |          | $\Box$   | _             | $\Box$ |   |               | 125      |          |          | $\neg$ |          | ╗      | $\neg$ | $\neg$       | П      |
|          | 26             | 6        | $\vdash$      | -1       | $\dashv$ | $\vdash$       | Н        |          | -        | $\dashv$ |    |  | 76       | Н        | 1        | +        | 1        | Н        | +             | Н      |   |               | 126      |          |          |        |          | ╗      | $\neg$ | $\neg$       | П      |
|          | 27             | 7        | $\dashv$      | ┪        | $\dashv$ | $\vdash$       | Н        |          | -        | $\dashv$ |    |  | 77       | Н        |          | $\top$   | +        | $\Box$   | _             | П      |   |               | 127      |          |          |        |          | $\neg$ |        | $\neg$       |        |
| _        | 28             | i        | $\dashv$      | ᅱ        | -        | $\blacksquare$ | Н        | $\vdash$ | Н        | Н        |    | -  | 78       | Н        |          | $\top$   | +-       | $\Box$   | _             |        |   |               | 128      |          |          |        |          |        |        | П            | П      |
| _        | 29             | ö        | $\vdash$      | -1       | $\dashv$ | Н              | Н        |          | $\vdash$ | Н        |    | -  | 79       | Н        |          | -        | 1        | Н        |               | П      |   | $\overline{}$ | 129      |          | $\Box$   |        |          |        |        | $\Box$       |        |
|          | 3              | Ŧ        | $\vdash$      | ┪        | -        |                | Н        | $\vdash$ |          |          |    |  | 80       | Н        |          | -        | 1        | Н        | _             | П      |   |               | 130      |          |          |        |          | $\neg$ |        |              |        |
|          | 31             | =        | Н             | -1       | $\dashv$ | H              | Н        | Н        |          | H        |    | _  | 81       | Н        | $\dashv$ | -        | +        | $\vdash$ |               | П      |   |               | 131      |          |          |        |          |        |        |              | П      |
| -        | 32             | =        | Н             | ┪        | $\dashv$ |                | $\vdash$ | -        |          | Н        |    | _  | 82       | $\vdash$ | $\dashv$ | $\top$   | +        | П        | _             | П      |   |               | 132      |          |          |        |          |        |        |              | $\Box$ |
| _        | 33             | =        | $\vdash$      | -1       | $\neg$   | Н              | Н        |          | -        |          |    |  | 83       | Н        |          | $\dashv$ | _        |          | $\neg \vdash$ |        |   |               | 133      |          |          |        |          |        |        |              | $\Box$ |
|          | 34             | =        | $\vdash$      | -        | -        | H              | Н        | Н        | Н        | Н        |    | $\vdash$   | 84       | H        | $\dashv$ | +        | 1        | М        | $\top$        | П      |   | Т             | 134      |          |          |        |          |        |        | $\Box$       |        |
|          | 35             |          | $\vdash$      | -1       | _        | H              | Н        | Н        | Н        | Н        |    |  | 85       | П        | $\sqcap$ | $\neg$   | $\top$   | П        | $\top$        | П      |   |               | 135      |          |          |        |          |        |        |              |        |
|          | 36             |          | $\vdash$      | ┪        | ᅱ        | Н              | $\vdash$ | $\vdash$ | Н        | $\vdash$ |    | -  | 86       | П        | $\Box$   | 十        | 1        | П        | $\neg \vdash$ | П      |   |               | 136      |          |          |        |          |        |        |              |        |
|          | 37             |          | H             | -        |          | $\vdash$       | Н        | H        | H        | Н        |    |  | 87       | П        |          | 十        | 1        | П        | _             | П      |   |               | 137      |          |          |        |          |        |        |              |        |
|          | 38             | Н        | H             | -1       | -        |                | H        | Н        | П        | Н        |    |  | 88       | П        | $\sqcap$ | 1        | T        | П        |               | П      |   |               | 138      |          |          |        |          |        |        |              |        |
|          | 39             |          | Н             | -1       | -        | Н              | Н        | Н        | Н        | М        |    | $\vdash$   | 89       | П        | $\Box$   | _        | T        | П        | $\neg$        | П      |   |               | 139      |          |          |        |          |        |        |              |        |
|          | 40             | -        | $\vdash$      | -1       |          | Н              | Н        | Н        | Г        | М        |    |  | 90       | $\sqcap$ | H        | 十        | 1        | П        |               | П      |   |               | 140      |          |          |        |          |        |        | $\Box$       |        |
|          | 41             | $\vdash$ | H             | ⊣        | -        | H              | Н        | Н        | $\vdash$ | Н        |    | $\vdash$   | 91       | П        |          | _        | 1        | П        | 1             | П      |   |               | 141      | П        |          |        |          |        |        |              | $\Box$ |
|          | 42             | 1        | H             | $\dashv$ | $\dashv$ |                | Н        | Н        | Н        | Н        |    | <b>—</b>   | 92       | Н        | $\vdash$ | 1        | $\top$   | П        | $\top$        | П      |   |               | 142      |          |          |        |          |        |        |              |        |
|          | 43             | $\vdash$ | Н             |          |          | Н              | П        | Н        | П        |          |    | <del>                                     </del> | 93       | П        | $\Box$   | 1        | 1        | П        | $\top$        | П      |   |               | 143      |          |          |        |          |        |        | $\square$    |        |
|          | 44             |          | H             | $\dashv$ | _        | Н              | П        | Н        |          | Н        |    |  | 94       | П        | М        | 十        | 1        | П        | $\neg$        | П      |   |               | 144      |          | П        |        |          |        |        |              |        |
|          | 45             | 1        | H             | ᅱ        | ۲        |                |          | П        | Г        | П        |    |  | 95       | Н        | П        | _        | 1        | П        | _             | П      |   |               | 145      |          |          |        |          |        |        |              |        |
|          | 46             | 1        | Н             | $\neg$   |          | <u> </u>       | П        |          | Т        | М        |    |  | 96       | П        | П        | 7        | $\top$   | П        | $\neg$        | П      |   |               | 146      |          |          |        |          |        |        |              | _]     |
|          | 47             |          | H             | $\dashv$ |          | Н              | Н        |          | _        | М        |    |  | 97       | П        | Н        | 十        | 1        | П        | $\dashv$      | П      |   |               | 147      |          |          |        |          |        |        |              |        |
|          | 48             | $\vdash$ | Н             | $\dashv$ | -        | $\vdash$       |          |          | Г        |          |    |  | 98       |          | П        | 十        | 1        | П        | $\top$        |        |   |               | 148      |          |          |        |          |        |        |              |        |
|          | , ~~           | ₩        | H             | $\dashv$ |          | ┢              |          | Т        | $\vdash$ |          |    |  | 99       | T        | П        | $\neg$   | $\top$   |          | $\neg$        |        | ı |               | 149      |          | П        |        |          |        |        | $\cdot$ T    |        |
|          | 49             | 1        | , ,           |          |          |                |          |          |          |          |    |  |          |          |          |          |          |          |               |        |   |               | 150      |          |          |        |          |        |        |              |        |